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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,197	04/16/2004	Young Nam Rhee	1811.03	7657
29338	7590	10/03/2007	EXAMINER	
PARK LAW FIRM 3255 WILSHIRE BLVD SUITE 1110 LOS ANGELES, CA 90010			VETERE, ROBERT A	
			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			10/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,197	Applicant(s) RHEE ET AL.	
	Examiner Robert Vetere	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/27/05</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1762

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recited the limitation, in line 15, that 66-75% of amyacetate and 66-75 % of ethylacetate is added to the compound for top coat (D). This is not possible because it adds to more than 100%.

Based on the specification, the examiner believes that the correct numbers should be 46-49% amyacetate and 20-26% ethylacetate.

Claim 1 is further rejected for indefiniteness due to inconsistencies between the specification and the claim. Although the terms of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. *In re Cohn*, 169 USPQ 95 (CCPA 1971). The language of claim 1 appears to claim that the celluloid is what is being coated. For example, in line 7, applicant claims "22-33 wt% of the surface treated celluloid." However, in example 1 of the specification it seems clear that the celluloid referred to in line 7 of the claim is part of the surface treatment compound and that a separate thermoplastic resin bead is being treated.

The term "celluloid" is a registered trademark and should be clearly identified as such. Furthermore, the use of a trademark in a claim renders the scope of the claim indefinite in that a trademark, strictly speaking, identifies the source rather than the composition of the product. The art recognized generic synonym "pyroxylin" should be substituted in the claims and identified in the specification.

Examiner's Comments

If the above problems are rectified the claim should be in condition for allowance. The closest art available does not anticipate or render obvious claim 1. Bell (US 1,982,280) teaches a nacreous coating

Art Unit: 1762

composition that can be applied to "metal, wood or other surfaces" which uses many of the solvents claimed in applicant's claim 1. However, Bell does not fairly teach or suggest the use of a thermoplastic resin bead as the core material, nor does it teach that the process of creating an imitation pearl is carried out in multiple steps using different coating media. Higgins (US 1,607,622) teaches a method of creating an imitation mother-of-pearl whereby a thermoplastic bead is first treated with a mixture of pyroxylin, acetone and benzene and then it is coated with fish scale pigments and pyroxylin. However, Higgins does not fairly teach or suggest the use of many of applicant's claimed solvents. Furthermore, neither Bell nor Higgins provides any reasonable motivation to combine the two references.

The follow revision will rectify the 35 USC 112 issues and place the claim in condition for allowance:

Art Unit: 1762

1. A method for coating thermoplastic resin beads for use in imitation pearls, the method comprising the steps of:

~~applying to dissolving~~ 12 - 29 wt% of celluloid ~~pyroxylin~~ a surface treatment compound (A) dissolved into a mixed solution of 14 - 18 wt% of acetone, 36- 42 wt% of ethylacetate, 18 - 22 wt% of butylacetate, and 3 - 6 wt% of benzene to form surface treatment compound (A); and

adding the thermoplastic resin bead to surface treatment compound (A) to form a treated thermoplastic resin bead;

~~coating 22 - 33 wt% of the surface-treated celluloid~~ the treated thermoplastic resin bead with at least one of a compound for an under coat (B), a compound for a mid coat (C) and a compound for a top coat (D),

wherein the compound for the under coat (B) is prepared by dissolving 22 - 33 wt% of the celluloid pyroxylin into a solvent of 33 - 38 wt% of ethylacetate and 33 - 38 wt% of amylacetate and adding 1 - 5 wt% of a pigment thereto,

the compound for the midcoat (C) is prepared by dissolving 22 - 33 wt% of the celluloid pyroxylin into a solvent of 25 - 29 wt% of ethylacetate and 40 - 44 wt% of amylacetate and adding 1 - 5 wt% of a pigment thereto, and

the compound for the top coat (D) is prepared by dissolving 22 - 33 wt% of the celluloid pyroxylin into a solvent of ~~[[66 - 75]]~~ 46-49 wt% of amylacetate and ~~[[66 - 75]]~~ 20-26 wt% of ethylacetate and adding 0.1 - 1 wt% of a pigment thereto.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Vetere whose telephone number is 571-270-1864. The examiner can normally be reached on Mon-Fri 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert Vetere


MICHAEL B. CLEVELAND
SUPERVISORY PATENT EXAMINER